

Applicant: H. Kinemura
U.S.S.N.: 09/629,339
Response to Final Office Action
Page 3 of 9

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

Claims 1-13 (Canceled)

14. (New) A cable modem comprising:

a cable modem proper that is configured so as to be connected by way of a coaxial cable to a CATV network;

an expansion unit being configured so as to have a wireless LAN function that permits communication with an information processing terminal on a wireless basis;

a connecting member that removably couples the cable modem proper and the expansion unit together by use of a plug and a connector; and

wherein the cable modem proper is further configured so as to measure a BER (bit error rate) on the wireless network side, and to check whether or not the measured BER value is equal to or greater than a first threshold value, and if the measured BER value is less than the first threshold value, the cable modem proper feeds a signal to an output level adjuster of the expansion unit which signal instructs it to decrease the output level through the connecting member and set the data transfer rate at a maximum value, then the cable modem proper restarts to measure the BER on the wireless network side;

and if the measured BER value is equal to or greater than the first threshold value, the cable modem proper compares the measured BER value with a second threshold value

Applicant: H. Kinemura
U.S.S.N.: 09/629,339
Response to Final Office Action
Page 4 of 9

that is greater than the first threshold value, and if the measured BER value is smaller than the second threshold value, the cable modem proper ends its operation without changing the output level;

and if the measured BER value is equal to or greater than the second threshold value, the cable modem proper checks whether or not the output level is at the maximum value;

and if the output level is not at the maximum value, the cable modem proper feeds a signal to the output level adjuster of the expansion unit which signal instructs it to increase the output level through the connecting member and set the data transfer rate at a maximum value, and then the cable modem proper restarts to measure the BER on the wireless network side;

and if the output level is at the maximum value, the cable modem proper measures the BER on the wireless network side again, and compares the BER measured in such a manner with said second threshold, and the cable modem proper ends its operation without changing the output level if the measured BER value is less than the second threshold value;

and if the measured BER value is equal to or greater than the second threshold value, the cable modem proper checks whether or not the measured data transfer rate is at a minimum value, and the cable modem proper ends its operation if the measured data transfer rate is at the minimum value;

Applicant: H. Kinemura
U.S.S.N.: 09/629,339
Response to Final Office Action
Page 5 of 9

and if the measured data transfer rate is not at the minimum value, the cable modem proper feeds a signal to an output level adjuster of the expansion unit which signal instructs it to decrease the data transfer rate through the connecting member, and measures the BER on the wireless network side again, so that an adjustment of the output level and the data transfer rate of the expansion unit is achieved.

15. (New) A cable modem as claimed in claim 14, wherein the plug is a plug for a LAN cable, and the connector is a connector for the LAN cable.

16. (New) A cable modem as claimed in claim 14, wherein the cable modem proper comprises a tuner, a demodulator, a modulator, a first and a second medium access controller, and a CPU, and wherein:

the tuner is arranged to select information received from the CATV network, convert the selected information into an intermediate frequency and then feed it to the demodulator, and conversely to transmit information fed from the modulator to the CATV network,

the first medium access controller is arranged to classify information fed from the demodulator and information fed through the expansion unit from the information processing terminal into signals to be processed inside the cable modem and signals to be transmitted to the information processing terminal and to the CATV network, and

Applicant: H. Kinemura
U.S.S.N.: 09/629,339
Response to Final Office Action
Page 6 of 9

the second medium access controller is arranged to convert and exchange data between the cable modem proper and the expansion unit.

17. (New) A cable modem as claimed in claim 16, wherein the CPU is arranged to control direction and timing in and with which to output information.